

ADMIT: ALMA DATA MINING TOOLKIT

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ADMIT (ALMA Data Mining Toolkit) is a toolkit for the creation and analysis of new science products from ALMA data. ADMIT is an ALMA Development Project written purely in Python. While specifically targeted for ALMA science and production use after the ALMA pipeline, it is designed to be generally applicable to radio-astronomical data. ADMIT quickly provides users with a detailed overview of their science products: line identifications, line 'cutout' cubes, moment maps, emission type analysis (e.g., feature detection), etc. Users can download the small ADMIT pipeline product (<20MB), analyze the results, then fine-tune and re-run the ADMIT pipeline (or any part thereof) on their own machines and interactively inspect the results. ADMIT will have both a GUI and command line interface available for this purpose. By analyzing multiple data cubes simultaneously, data mining between many astronomical sources and line transitions will be possible. Users will also be able to enhance the capabilities of ADMIT by creating customized ADMIT tasks satisfying any special processing needs. Future implementations of ADMIT may include EVLA and other instruments.